

HEALING HANDS



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Meeting the Challenges of Comorbid Mental Illness & Substance-Related Disorders

Comorbid mental illness and substance-related disorders—commonly known as co-occurring disorders (COD) or dual diagnosis—present difficult treatment problems. Clients with COD are extremely heterogeneous with respect to type and severity of illness, personal skills, and available care networks. Those who are homeless may be at increased risk for exacerbated illness due to limited treatment access and lack of personal supports. The following articles discuss current scientific understanding of these frequently comorbid conditions and describe therapeutic interventions used by providers serving homeless clients who experience them concurrently.

It is noteworthy that non-substance-related mental illnesses—including mood, anxiety, personality, and schizophrenia-spectrum disorders—are all associated with an increase in substance-related (substance use or substance-induced) disorders; and that individuals with the most severe mental illnesses have the highest rates of co-occurring substance-related disorders.^{1,2}

PREVALENCE The association of mental illness with substance-related disorders is well established. Lifetime prevalence rates of alcohol and drug use disorders are approximately 17% in the general population; 50% to 56% for people with bipolar disorder; 47% to 50% for people with schizophrenia; 30% for people with other mood or anxiety disorders; 24% to 27% for people with posttraumatic stress disorder; 18% to 20% for people with antisocial personality disorder; and 17% to 18% for people with borderline personality disorder.^{1,3} In a national sample, 75% of homeless clients with a past-year drug disorder had a comorbid non-substance-related mental illness.⁴ Characteristics of individuals prone to COD include family history of substance use, male gender, young adult age, single marital status, lower level of education, conduct disorder and antisocial personality disorder, multidrug use, homelessness, incarceration, and limited access to treatment.^{1,3}

CONSEQUENCES With appropriate treatment, co-occurring mental illness and substance use disorders can improve over time, unless mortality is hastened by comorbidities including those associated with addiction.^{1,5} Unfortunately, as many as half of adults with co-occurring disorders may have received treatment for neither. A 2004 national survey reports that 50% of adults known to have comorbid mental illness and substance use disorder did not receive treatment for either condition within the previous year.⁶ The consequences of delayed or lapsed treatment may include more severe symptoms, frequent relapses, hospitalizations, homelessness, violence, incarceration, and/or worse health outcomes, including serious infections associated with drug use such as HIV and hepatitis.^{1,3}

Antisocial personality disorder (ASPD) and its precursor conduct disorder are established risk factors for especially severe comorbid substance-

related disorders associated with: earlier age of onset, rapid progression to dependence, multi-drug abuse, and higher risk for negative outcomes including incarceration.¹ Acute psychiatric inpatient treatment has been documented in a large percentage of incarcerated individuals with these co-occurring disorders, which have been shown to exacerbate the linkage between homelessness and incarceration.^{7,8} The good news is that successful treatment of ASPD and comorbid substance-related disorders has been reported with both behavioral and pharmacotherapeutic modalities.⁹ Positive results presuppose individualized treatment based on specific characteristics of the client's condition and care to avoid stigmatization within the community.

TREATMENT The challenges in treating individuals with co-occurring mental illness and substance-related disorders reflect clients' extremely diverse care needs. Evidence-based best practices employ integrated care models in which mental health and addiction services are available at one location from a team of clinicians with mental health, addiction, and case management expertise.^{10,11,12} Drake and colleagues go further, suggesting that because clients with co-occurring disorders are the norm rather than the exception, all mental health programs should be designed with integrated facilities and staff.¹

A number of psychosocial and pharmacological interventions have been demonstrated to alleviate symptoms, enhance stability, and reduce substance use for people with co-occurring disorders.

Psychosocial Interventions Most chronic health conditions benefit from early diagnosis and treatment. Because many of the most serious and persistent mental health conditions experienced by adults first present during childhood or adolescence, there are strong public health reasons for child-adolescent interventions.¹³

Prospective, randomized research begun in the 1980s to mediate early aggressive, disruptive behaviors in young children used the Good Behavior Game (GBG) as a classroom management and socialization strategy implemented by elementary teachers. GBG has demonstrated consistently positive outcomes in reducing impulsive behaviors as well as

substance use and serious antisocial, violent, and criminal behavior in high-risk males, 19 to 21 years of age, and has been named a preventative *best practice* by numerous federal agencies.^{14,15}

Psychosocial modalities demonstrating consistent effectiveness for adults with comorbid mental illness and substance-related disorders include:^{1,16}

- **Peer-oriented group interventions** directed by a professional leader to help clients reduce substance use and improve other outcomes
- **Long-term (one-year or more) residential interventions** to reduce substance use and improve other outcomes in clients who have failed to respond to outpatient interventions and for those who are homeless
- **Intensive case management**, including Assertive Community Treatment, to improve residential stability and community tenure

Residential addiction programs that provide on-site group interventions for clients with co-occurring disorders and those that have more counselors specially trained in the treatment of COD report a greater number of clients using mental health services and higher rates of retention. These factors correlate with greater improvement in mental health status and reduction in substance use after treatment.¹¹

As many as 80% of homeless single adults with non-substance-related mental illnesses do not receive treatment for these conditions.⁴ The Assertive Community Treatment (ACT) model of outreach and intensive case management has demonstrated success in engagement and retention of clients with serious and complex behavioral health disorders through the development of dependable relationships.¹⁷ Coupled with a *no wrong door* approach to service access, ACT enables clients with COD to receive assistance with housing, disability benefits, and other services. Linkage to supportive services fosters the development of trusting relationships within a consistent program over a number of months before formal treatment begins.¹⁰

Pharmacological Interventions In addition to psychosocial interventions, individuals with COD benefit from simultaneous treatment of mental illness and addiction disorders through psychopharmacologic interventions. The neurobiology of addiction impairs control over adherence to prescribed treatment and is manifested by drug craving and compulsive, continued drug use despite obvious harm to self and significant others.¹⁸ Psychotherapeutic medications used to break the cycle of addiction in response to the brain's altered chemistry are listed in the table^{18,19} (for more information see www.nhchc.org/substanceabuse.html; www.mattc.org).

IMPACT ON POLICY Assessing the long-term implications for homeless people with co-occurring mental illness and substance-related disorders, the Milby team at the University of Alabama has compared interventions that variably combine treatment-associated housing (with or without a requirement for abstinence), behavioral day treatment activities such as relapse prevention groups, work therapy, and aftercare groups.^{4,20,21} Among the four trials conducted to date, one compared three groups that received slightly different housing arrangements during a six-month treatment program: abstinence-contingent housing (ACH), nonabstinence-contingent housing (NACH), and no provided housing (NH). After 12 months (six months after formal treatment ended), 42% of clients from the ACH group, 33% from the NACH group, and 26% from the NH group were stably housed. These results were reported as less than optimal and related to limited post-treatment housing options. Housing options that require drug tests with 100% negative results for

PHARMACOTHERAPY FOR ALCOHOLISM AND OPIATE ADDICTION

Treatment	Psychotherapeutic Medications ^{18,19}
Acute Alcohol Withdrawal	<p>Benzodiazepines: lorazepam (Ativan) commonly used but can induce tolerance and dependence</p> <p>Anticonvulsants: carbamazepine (Tegretol), divalproex sodium/sodium valproate (Depakote), and gabapentin (Neurontin)</p> <p>Adjuvants: propranolol (Inderal) with lorazepam or anticonvulsants to decrease symptoms of anxiety; antipsychotics for hallucinations</p>
Alcohol Relapse Prevention	<p>Opioid receptor blocker: naltrexone (ReVia) cannot be used in clients with acute or chronic pain or those using methadone or buprenorphine</p> <p>Aldehyde dehydrogenase inhibitor: disulfiram (Antabuse) started 72 hours after client is alcohol free; causes severe nausea and vomiting in the presence of alcohol; shows positive effects on cocaine addiction</p> <p>Acamprosate (Campral) appears to work through the GABA system; positive effects on craving and cue-related relapse; does not interact with most other medications</p> <p>Anticonvulsant: topiramate (Topamax) stimulates the GABA b receptor; expensive</p> <p>Anticonvulsant mood stabilizer: divalproex sodium/sodium valproate (Depakote) reduces heavy drinking in comorbid bipolar disorder and alcohol dependence</p> <p>Gastrointestinal agent: ondansetron (Zofran) effective in trials with early onset alcohol disorder and high heritability</p> <p>Autonomic nervous system agent: baclofen (Lioresal) promising in alcohol, cocaine, and amphetamine addiction</p> <p>Opioid antagonist: nalmefene (Revex) used in oral form to reduce alcohol craving</p>
Opioid Withdrawal	<p>Mild opioid withdrawal: clonidine (Catapres) alone or with benzodiazepines, antihistamines, or phenobarbital</p> <p>Major opioid (heroin) withdrawal: methadone hydrochloride (Methadone) or buprenorphine (Subutex)</p>
Opioid Maintenance	<p>Relapse to opiate use occurs in more than 80% of clients regardless of types of therapy received due to permanent disruption of natural opiate receptors.</p> <p>Methadone or buprenorphine can maintain abstinence and stop cravings without euphoria, sedation, or analgesic effect. Buprenorphine (Subutex) is safer than methadone.</p> <p>Buprenorphine combined with naloxone (Suboxone) reverses the effects of opioids and further reduces risk of overdose.</p>

four months use a standard that can be impossible for clients with long-term addiction-related disorders to meet and exclude people the programs were designed to serve. Similar respective results were reported for stable employment: 40% (ACH), 33% (NACH), and 26% (NH).²⁰ Unrelated research points to supported employment as one of the best interventions for people with severe mental illness.²²

Stefan Kertesz, MD, MSc, has reviewed the literature comparing Housing First (clients housed without requirements for treatment) and more traditional rehabilitation-focused approaches. He offers a caveat about using research findings to promote particular interventions: "It is important to gather accurate, replicable data and provide research outcomes in an objective, fair manner. Make sure that policy claims do not go beyond what the research has actually shown. One part of my work is to act as a translator, helping policy makers understand what the

research means without over promising. Why? Because if public policy is built on excessively optimistic interpretations of research, then potentially helpful research may not be trusted in the future.”

Kertesz also warns about designing clinical trials to measure the impact of particular service interventions on heterogeneous populations. People with serious mental illness and co-occurring addiction disorders may have significantly different needs from those with situational depression and anxiety secondary to primary substance abuse and related life changes.

“For effective research, you need sufficient resources to provide housing with supportive services for individuals with behavioral health risks,” he contends. “The length of time that supported housing is provided may vary in many instances, but for those with serious and persistent mental illness who are unable to work and function readily in the community, ongoing supportive housing and health care are necessary.”

Applying Evidence-Based Initiatives

OUTPATIENT ADDICTION PROGRAM Soft-spoken **Jan Caughlan, LCSW-C**, director of Mental Health and Social Work for Health Care for the Homeless in Baltimore, is always on the lookout for ways to help her clients. She’s very proud of her agency’s successful Outpatient Addiction Program, which has been certified for many years. “What began organically using evidence-based research conducted by psychiatrist Fred Osher, MD and colleagues¹⁰ has developed purposefully into an integrated team of clinicians that facilitate group care,” Caughlan explains.

The significant difference that Baltimore’s intensive outpatient treatment program makes for individuals with comorbid mental illness and addiction disorders is attributable to two special elements: intensive client and clinician contact, and a therapist case manager with specialized training and competence in co-occurring diagnoses who helps the clinical team address the interactive nature of behavioral health conditions and how they affect clients.

A Baltimore City Open Society Institute (OSI) Grant intended to make a difference in the city’s neediest neighborhoods and help people become self-sufficient allowed HCH to increase its capacity to provide dual disorder services. “Baltimore is also fortunate because Maryland’s progressive public health program allows mental health care to be billed through Medicaid,” adds Caughlan.

ADDICTION CARE Baltimore HCH’s Addiction Services Director **Kelvin Silver, MEd, LPC, LCADC, CRC, NCC**, says using the screening tool developed through the OSI Grant (www.nhchc.org/SymptomScreeningForm.pdf) and now mandated across the city’s treatment system “heightens our ability to identify co-occurring disorders and has increased treatment effectiveness by as much as 50%. It’s the chicken and egg sort of thing—without the dual

diagnosis history, clinicians weren’t prepared for the comorbid issues, but after clients’ co-occurring problems are identified, we can build appropriate services to help them. Having a mental health professional co-located on the addiction team has also been of great benefit.”

Accepting that many clients with comorbid diagnoses may not be able to achieve abstinence early in the course of treatment allows clinicians to employ harm reduction strategies and reduce negative consequences. “Only 5% of individuals with co-occurring disorders achieve stable remission following a standard treatment episode using sequential treatment of mental and substance use disorders,” Silver says. “With a long-term integrated care approach, treatment outcomes improve and stable remission increases by 10% to 20% per year.”

Silver continues, “The best results come from motivation-based integrated treatment that is adapted to the clients’ desire for change. Our treatment stages for clients with comorbid disorders move from persuasion to active treatment to relapse prevention to social skills training to self-help to community support. Dual disorder groups of 4 to 6 active members are best led by two facilitators, one with expertise in mental health treatment and the other in substance-related disorders. Individuals that progress from the persuasion group to the active treatment group can remain involved in the former for a time.

“Currently, we are in the pilot phase with Suboxone implementation,” Silver adds. “We are also looking at drugs that can facilitate alcohol detox because it is the most prevalent drug abused by our dually diagnosed patients. Too many complications arise when alcohol use is abruptly discontinued, requiring medical management in a hospital setting.”

COMBINED BEHAVIORAL HEALTH SERVICES

“I’m a mental health social worker surrounded by addiction professionals, and I couldn’t be happier!” says Baltimore HCH’s co-occurring therapist case manager **Shannon Harig-Blaine, LCSW-C**. “One hundred percent of my clients are dually diagnosed, and I talk all day long about integrated treatment options and treatment planning goals that will merge our treatment plans by melding the language. Our dual diagnosis groups, called *Second Opinion*, meet for an hour three times each week. Clients also see their mental health therapist and addiction counselor, which means they are participating in supported care five times a week at the same site. It really pays off because they get well faster, learn how to manage their own symptoms, and realize that recovery is a lifetime thing,” she says. Group facilitators meet several times each month to discuss client progress and how to help groups meet clients at their different stages of recovery.

BRIEF INTERVENTIONS Camden sits across the Delaware River from Philadelphia, a suburb to the historic city. In this western New Jersey town of 79,000, **Brian Coangelo, LSW**, is a counselor and outreach worker for Project HOPE, an HCH grantee. “There are many avenues to establishing relationships with clients,” he says. “I’ve found that an approach known as the *brief intervention* can be really helpful to engage clients, especially those with comorbid diagnoses, and then help them do something about their substance abuse.”

Clinical recommendations indicate that brief interventions or brief therapies for substance abuse “can be particularly useful in treatment settings when they are used to address specific targeted client behaviors and issues in the treatment process that can be difficult to change using standard treatment approaches.”²³ Clinicians who understand the process integrate it into daily care patterns, knowing that the basic

goal is to reduce harm from continued substance use. An attitude of understanding and acceptance helps clinicians become active listeners as they guide their clients to explore and resolve ambivalence (through motivational interviewing) and initiate the stages of change that evolve from thinking about trying to achieve and maintain new behaviors. Helping the client focus on intermediate steps often allows more immediate success and reinforces motivation to change.

The six evidence-based components of effective brief interventions used by Project HOPE are known as FRAMES:²³

- *Feedback* is given to the individual about personal risk or impairment.
- *Responsibility* for change belongs to the participant.
- *Advice* to change is made explicit.
- *Menu* of alternative self-help or treatment options is offered to the participant.
- *Empathic* style is used by the counselor.
- *Self-efficacy* or optimistic empowerment is engendered in the participant.

Five basic steps incorporating FRAMES should be consistent throughout the treatment intervention process:

- 1) Introducing the issues within the context of the client's health;
- 2) Screening, evaluating, and assessing;
- 3) Providing feedback;
- 4) Talking about change and setting goals; and
- 5) Summarizing and reaching closure.

One of Coangelo's clients, **Andrea Grecco**, benefited from brief interventions as she started her successful journey to better health and a more stable life. "Several years ago I was living in my truck and having terrible stomach pains," Grecco says. "That's when I first saw Dr. Zazzo at Project HOPE. He is so kind and he really listens to you—not like doctors at the hospital [emergency department]. One of the questions he asked me was about my drinking, and I admitted that it was a little out of control. He explained how that might be related to the stomach pain and helped me see what steps we could take to help me get well. He connected me to Brian, and now I work with the clinic team and they are all super. I've been in recovery for two years, but I also have depression, Lyme disease, and fibromyalgia. The depression is the worst. We're continuing to work on getting the meds right, and I attend outpatient support groups. I've progressed from my truck to renting a room to my own apartment. I work as a

landscaper and have close to 50 repeat clients. But the work is seasonal and that makes it hard to get through the winter—sometimes I don't know where the rent will come from."

INPATIENT TREATMENT **Jeff Lang, MS, LADAC**, has worked with people with co-occurring disorders for many years and is currently at the Camden County Health Services Center (CCHSC). Their inpatient behavioral health services facility is a 158-bed unit that is almost brand new, with 25 beds dedicated to dual diagnosis. "We're fortunate to have this facility," Lang says. "The staff includes a wonderful psychiatrist as well as licensed and Master's level addiction counselors. The group works closely with other community resources in providing the region with an integrated continuum of care."

The Mental Illness Chemical Abuse (MICA) Program at CCHSC is designed to address co-occurring diagnoses. This voluntary inpatient program uses a multidisciplinary treatment team and individualized treatment protocols, explains Lang. "It has a wonderful range of services including education, rehab, and transition-skills programs. I find that this is really a person-to-person business. People with mental health disorders respond to relationships and clinicians who offer them respect and a sense of hope."

SUCCESSFUL JOURNEY TO RECOVERY Just over eight years ago, **Gary Cobb**, community organizer for Central City Concern (CCC), came to the Hooper Detoxification Center in Portland, OR. He'd been living in Tacoma, WA, where a Jesuit missionary told him about the program. Gary knew it was his time to give up heroin. "Three months clean, I attended my first Recovery Association Project meeting and I've been involved in advocacy ever since," he says.

"CCC's wonderful Recovery Mentor Program links you to support networks, a place to work, live, and learn. Its mission is to provide pathways to self-sufficiency through active intervention in poverty and homelessness," explains Cobb. "At first I was a janitor at the Old Town Clinic and just started my new job on January 20. Now it's my time to stand up for others; speak out about how well the program works and why it's important to the entire community. I keep going to my recovery meetings and have daily contact with someone in my support group. I've learned that each day is about the best choices I can make for my personal recovery."

COMPREHENSIVE SERVICE MODELS

Central City Concern, serving homeless and low-income individuals in Portland, OR, is one of the most comprehensive service centers in the country. Its continuum of care includes traditional, allopathic, and complementary medicine; medically monitored detoxification, chemical dependency treatment, and mental health services; case management and professional mentoring; special needs housing, very low income housing, workforce development, and employment services.²⁴ Programs are designed to promote transformational change:

- Housing supports people through recovery from alcohol and drug addictions.
- Community emphasis nurtures positive peer relationships.
- People earn legitimate income from benefits and employment.
- Self image improves and a more positive outlook develops.
- People become productive and want to give back.

Rachel Post, MSSW, LCSW, director of CCC Supportive Housing and Employment, sees the program's accomplishments every day because a majority of staff are in recovery. "In fact," Post says, "many program graduates have achieved high levels in management and are enjoying happy and productive lives." Client success measured by program completion rate surpasses rates reported by other behavioral health programs; 58% of people leaving the CCC program in 2007 moved to permanent housing, had completed addiction treatment, and were either employed or receiving federal disability benefits.²⁵

CCC transitional housing follows an alcohol and drug free community (ADFC) model. Post reports that 44% of clients meet the definition of chronically homeless yet have chosen to live in a clean and sober supportive community. "Many credit this new community with making the difference in their recovery effort," she says. "The integration of evidence-based supported employment with clean and sober peer-supported housing, healthcare, and outpatient treatment helps to explain the significant increase in CCC's completion rates."

The impact of CCC's drug treatment programs on Portland is significant. Results from a study of 87 CCC clients demonstrated profound reductions in both drug use (95%) and criminal activity (93%) post-treatment compared to pre-treatment levels.²⁶ Estimated cost savings to the community from

reduced criminal activity of these chronic drug users was at least \$2 million per year. Economic returns from effective drug treatment can also be realized through lower utilization of emergency services, reduced risk HIV transmission among IV drug users, and increased employability and productivity of service recipients.²⁶

Albuquerque HCH is recognized for providing effective substance abuse treatment services to homeless people.²⁴ Clients with substance use disorders, many of whom have comorbid mental illness, have a broad range of treatment options:

- **Harm Reduction Outreach Program:** provides harm reduction materials, education, and sterile syringes to help prevent HIV infection.
- **STARS:** a drop-in center where weekly movies, food and coffee welcome people to therapeutic groups, crisis counseling, and intensive case management.
- **Tierra Del Sol—Women's Residential Recovery Program:** employs harm reduction and offers on-site assessment, therapy, group counseling, anger management, coping skills, legal services, and case management to a community of women with children.
- **Casa Los Arboles—Modified Social Recovery Program:** a residential program for men that emphasizes self-management and transition from volunteer to paid work.
- **ArtStreet Program:** an open air art gallery that engages adults and children in creative pursuits and discovery.
- **Villa de Paz—Transitional Housing Program:** a sober transitional apartment complex for men or women who have achieved at least 4 months of recovery. Residents can live there up to 14 months while working, attending school, and participating in individual and group counseling.

Strategies that have proven effective for engagement and long-term retention of clients include: outreach, primary health care services,

housing and practical assistance, safe and non-threatening environments, motivation through psychosocial groups, peer support and leadership, family- and client-based treatment.

Tina Carlson, APRN, BC, one of Albuquerque HCH's psychiatric nurse practitioners, says: "My clients have complex needs; many suffer from co-occurring disorders that exacerbate one another and are clinically difficult to treat. Understanding the neurobiology of addiction helps me care for their mental illness even in the face of substance dependence. But preventing stigmatization in a state that does not allow eligibility for disability benefits to severely impaired people who are actively using drugs is a continual challenge. We are fortunate to have successful residential programs funded by grants that provide a structured environment so clients can find success over a year-long period. New drug therapy is helping people with opioid dependence quickly benefit from treatment and establish productive lives."

In 2002, the Food and Drug Administration approved buprenorphine/naloxone combination therapy (Suboxone), an opioid partial agonist, for use in medication-assisted opioid addiction treatments. Suboxone rarely produces euphoria or sedation (common to heroin and methadone) and it has very low risk of overdose. A SAMHSA-funded Buprenorphine Physician Clinical Support System allows a network of trained and certified physicians skilled in this therapy (induction, stabilization, and maintenance phases) to mentor other physicians in its use (www.buprenorphine.samhsa.gov/).

Suboxone is currently an expensive medication; coverage varies by state and insurance plan, but Medicaid coverage is available in some states and is mandated in New Mexico. Office-based treatment with Suboxone has been implemented successfully in primary care settings across the country.²⁷

In Boston, a treatment protocol was designed to compare outcomes for homeless clients with those of clients with stable housing. Despite greater social instability, increased comorbidity, and more chronic drug use among the homeless opioid dependent clients, buprenorphine treatment was effectively implemented and outcomes were comparable to those of housed patients.²⁷

Miriam Komaromy, MD, medical director for Albuquerque HCH, started a pilot Suboxone program in 2006 that begins with an initial patient education group session, education materials, and a treatment agreement outlining expectations for clients. While the medication quickly interrupts the craving and brain fog common with chronic opiate addiction, it continues to control symptoms of posttraumatic stress disorder, reducing functional impairment. Pharmacotherapy alone is not sufficient, however; treatment success depends on concurrent social services, support networks, and counseling.²⁷

"Our clinical support network includes integrated care provided by a psychiatric nurse practitioner who screens and treats mental health problems, a behaviorist who works on addiction and trauma, and an ongoing relationship with primary care providers," Komaromy adds. Support groups and other structured counseling programs are required along with the keystone "Life Skills—Recovery 101" that meets every week.

In addition, the Albuquerque team envisioned a program that would reduce recidivism for individuals coming out of prison who were addicted to heroin. The result was a \$2 million, five-year federal grant awarded in October 2008 that will enable 100 clients with addiction disorders to enroll in the Suboxone treatment program each year.

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